PATENT ( Customer No. 22,852 Attorney Docket No. 08702.0097-00000

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

in re Application of:	
Yannoni et al.	) Group Art Unit: Not Yet Assigned
Application No.: 10/523,014	Examiner: Not Yet Assigned
International Filing Date: August 1, 2003 § 371 Date: February 1, 2005	) ) ) Confirmation No.: Not Yet Assigned
For: MK2 INTERACTING PROTEINS	)
Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	
Sir:	

## **INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. § 1.97(b)**

Pursuant to 37 C.F.R. §§ 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents on the attached listing. This Information Disclosure Statement is being filed before the mailing date of a first Office Action on the merits for the above-referenced application.

Copies of the listed foreign and non-patent literature documents are attached.

Copies of the U.S. patent publications are not enclosed.

Applicant respectfully requests that the Examiner consider the listed documents and indicate that they were considered by making appropriate notations on the attached form.

This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that each or all of the listed

PATENT Customer No. 22,852 Attorney Docket No. 08702.0097-00000

documents are material or constitute "prior art." If the Examiner applies any of the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute "prior art" under United States law, Applicants reserve the right to present to the office the relevant facts and law regarding the appropriate status of such documents.

Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention over the listed documents, should one or more of the documents be applied against the claims of the present application.

If there is any fee due in connection with the filing of this Statement, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, L.L.P.

Dated: September 15, 2005

Rebecca M. McNeill Reg. No. 43,796

IDS Form	PTO/SR/08:	Substitute for	form4449A/PTC

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	:

		/	80
	Complete if Known	SEP 1	5 2005
Application Number	0/523,014		اق
Filing Date	February 1, 2005	12	.8/
First Named Inventor	Yannoni et al.	TO FRA	DEMMO
Art Unit	Not Yet Assigned		
Examiner Name	Not Yet Assigned		
Attorney Docket Number	08702.0097-00000		

	U.S. PATENTS AND PUBLISHED U.S. PATENT APPLICATIONS				
Examiner Cite		te Document Number	Issue or	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where
Initials	No.³	Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY		Relevant Passages or Relevant Figures Appear
		US-4,522,811	06-11-1985	Eppstein et al.	
		US-4,554,101	11-19-1985	Норр	
		US-4,609,546	09-02-1986	Hiratani	
		US-4,640,835	02-03-1987	Shimizu et al.	
		US-4,766,106	08-23-1988	Katre et al.	
		US-4,791,192	12-13-1988	Nakagawa et al.	
		US-5,116,944	05-26-1992	Sivam et al.	
		US-5,414,135	05-09-1995	Snow et al.	
		US-5,864,020	01-26-1999	Bennett et al.	

Note: Submission of copies of U.S. Patents and published U.S. Patent Applications is not required.

	FOREIGN PATENT DOCUMENTS					
Examiner Initials	Cite No. <sup>1</sup>	Foreign Patent Document  Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	Translation <sup>6</sup>
		WO 87/05330	09-11-1987	Bergh et al.		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Translation <sup>6</sup>
		"Mammalian Matchmaker Two-Hybrid Assay Kit User Manual", Clontech, PR17119 (2001).	
		ALTSCHUL et al., "Basic Local Alignment Search Tool," J. Mol. Biol., 215(3):403-10 (1990).	
		APLIN AND WRISTON, "Preparation, Properties, and Applications of Carbohydrate Conjugates of Proteins and Lipids," CRC Crit. Rev. Biochem., 22:259-306 (1991).	
		BHADRA et al., "Pegnology: a review of PEG-ylated systems," Pharmazie, 57:5-29 (2002).	
		BURKE, "Protein-Protein Interactions, Pathways and Screens, 21-24 (March 2003).	
		EDGE et al., "Deglycosylation of Glycoproteins by Trifluoromethanesulfonic Acid," Anal. Biochem., 118(1):131-37 (1981).	
		FALB et al., "Chemical Genomics: Bridging the Gap Between the Proteome and Therapeutics," Current Opinion In Drug Discovery & Development 5(4):532-39 (2002).	
		FIELDS AND SONG, "A Novel Genetic System to Detect Protein-Protein Interactions," Nature, 340:245-246 (1989).	
		FIELDS et al., "The Two-Hybrid System: An Assay for Protein-Protein Interactions," Trends in Genetics, 10:286-292 (1994).	
		FRALEY et al., "New Generation Liposomes: The Engineering of an Efficient Vehicle for Intracellular Delivery of Nucleic Acids," Trends Biochem. Sci., 6:77-80 (1981).	
		GUIDEZ et al., "Recruitment of the Nuclear Receptor Corepressor N-CoR by the TEL Moiety of the Childhood Leukemia-Associated TEL-AML1 Oncoprotein," Blood, 96 (7):2557-2561 (2000).	
		GUNSTER, et al., "Identification and Characterization of Interaction between the Vertebrate Polycomb- Group Protein BMI1 and Human Homologs of Polyhomeotic, Molecular and Cellular Biology, 17:2326-2335 (1997).	
		HAKIMUDDIN et al., "A Chemical Method of the Deglycosylation of Proteins," Arch. Biochem. Biophys., 259:52 (1987).	

IDS Form PTO/SB/08: Substitute for for 449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 2 of 3

Application Number 0/523,014 SEP 1 5 2005 B

Filling Date February 1, 2005

First Named Inventor Yannoni et al.

Art Unit Not Yet Assigned

Examiner Name Not Yet Assigned

Attorney Docket Number 08702.0097-00000

	NON PATENT LITERATURE DOCUMENTS
	HAN ET AL., "Emerging Targets for Anti-Inflammatory Therapy, Nature Cell Biology," 1:E39-40 (1999).
	HARRIS et al., "Pegylation: A Novel Process for Modifying Pharmacokinetics," Clin. Pharmacokinet., 40:539-551 (2001).
	HEIDENREICH, et al.," MAPKAP Kinase 2 Phosphorylates Serum Response Factor <i>in Vitro</i> and <i>in Vivo</i> ," J. Biological Chemistry, 274(20):14434-14443 (1999).
	HUANG et al. "LSP1 is the Major Substrate for Mitogen-activated Protein Kinase-activated Protein Kinase 2 in Human Neutrophils", Journal of Biological Chemistry, 272(1):17-19 (1997).
	HUOT et al., "Oxidative Stress-Induced Actin Reorganization Mediated by the p38 Mitogen-Activated Protein Kinase/Heat Shock Protein 27 Pathway in Vascular Endothelial Cells," Cir. Res., 80(3):383-92 (1997).
	JANKNECHT, "Cell Type-specific Inhibition of the ETS Transcription Factor ER81 by Mitogen-activated Protein Kinase-activated Protein Kinase 2," J. Biological Chemistry, 276(45):41856-14861 (2001).
	KOTLYAROV et al., "Distinct Cellular Functions of MK2, Molecular and Cellular Biology," 22 (13):4827-4835 (2002).
_	KOTLYAROV et al., "MAPKAP Kinase 2 is Essential for LPS-induced TNF-α Biosynthesis," Nature Cell Biol., 1:94-97 (1999).
	KRÄMER, et al., "A Novel Isoform of the Smooth Muscle Cell Differentiation Marker Smoothelin", J Mol. Med., 77:294-98 (1999).
	KYTE et al., "A Simple Method for Displaying the Hydropathic Character of a Protein," J. Mol. Biol., 157:105-132 (1982).
	LEHNER et al., "Mitogen-Activated Protein Kinase-Activated Protein Kinase 2-Dificient Mice Show Increased Susceptibility to Listeria <i>Monocytogenes</i> Infection", 168(9):4668-4673 (2002).
	LIPMAN et al., "Rapid and Sensitive Protein Similarity Searches," Science, 227(4693):1435-41 (1985).
	LUBAN, et al., "The Yeast Two-Hybrid System for Studying Protein-Protein Interactions," Curr. Opinion Biotechnology, 6:59-64 (1995).
	LUZI et al., "Evolution of Shc Functions from Nematode to Human," Curr. Opin. Genetics and Development, 10:668-674 (2000).
	MAHTANI et al., "Mitogen-Activated Protein Kinase p38 Controls the Expression and Postranslational Modification of Tristetraprolin, a Regulator of Tumor Necrosis Factor Alpha mRNA Stability," Molecular and Cellular Biology, 21:6461-6469 (2001).
	MANNINO et al., "Lipsome Mediated Gene Transfer," Biotechniques, 6(7):682-90 (1988).
	MIGLIACCIO et al., "The p66 <sup>shc</sup> Adaptor Protein Controls Oxidative Stress Response and Life Span in Mammals," Nature, 402:309-313 (1999).
	NEININGER et al., "FRET-based Detection of Different Conformations of MK2," EMBO Reports, 2:703-708 (2001).
	NEUFELD et al., "Serine/Threonine Kinases 3pK and MAPK-activated Protein Kinase 2 Interact with the Basic Helix-Loop-Helix Transcription Factor E47 and Repress Its Transcriptional Activity," J. Biological Chemistry, 275 (27):20239-20242 (2000).
	PEARSON, et al., "Improved Tools for Biological Sequence Comparison," Proc. Natl. Acad. Sci. USA, 85:2444-2448 (1988).
	RANE, et al., "p38 Kinase-dependent MAPKAPK-2 Activation Functions as 3-Phosphoinositide-dependent Kinase-2 Akt in Human Neutrophils," J. Biological Chemistry, 276(5):3517-3523 (2001).
	ROUSE et al., "A Novel Kinase Cascade Triggered by Stress and Heat Shock that Stimulates MAPKAP Kinase-2 and Phosphorylation of the Small Heat Shock Proteins", Cell, 78:1027-10237 (1994)
	SHE et al., "ERKs and p38 Kinase Phosphorylate p53 Protein at Serine 15 in Response to UV Radiation, J. Biological Chemistry, 275,(27):20444-20449 (2000).
	SHE et al., "Role of MAP Kinases in UVB-Induced Phosphorylation of p53 at Serine 20," Oncogene 21(10):1580-9 (2002).
	SMITH et al., "Overlapping Genes and Information Theory," J. Theor. Biol., 91(2):379-80 (1981).
	SOJAR et al., "A Chemical Method for the Deglycosylation of Proteins," Arch. of Biochem. and Biophysics, 259 (1):52-57 (1987).
	STOKOE et al. "The Substrate Specificity and Structure of Mitogen-Activated Protein (MAP) Kinase-Activated Protein Kinase-2," Biochem. J. 296:843-849 (1993).
	THOTAKURA et al., "Enzymatic Deglycosylatin of Glycoproteins," Meth. Enzymol., 138:350-59 (1987).
	TRINEI et al., "A p-53-p66Shc Signalling Pathway Controls Intracellular Redox Status, Levels of Oxidation-Damaged DNA and Oxidative Stress-Inducted Apoptosis," Oncogene 21(24):3872-78 (2002).

SEP 1 5 2005 Complete if Known IDS Form PTO/SB/08: Substitute for for 49A/PTO Application Number 0/523,014 INFORMATION DISCLOSURE Filing Date February 1, 2005 First Named Inventor Yannoni et al. STATEMENT BY APPLICANT Not Yet Assigned Art Unit (Use as many sheets as necessary) Examiner Name Not Yet Assigned 3 Attorney Docket Number 08702.0097-00000 Sheet

	NON PATENT LITERATURE DOCUMENTS	
	VAN DER LOOP, et al., "Smoothelin, a Novel Cytoskeletal Protein Specific for Smooth Muscle Cells," J. Cell Biology, 134 (2):401-411 (1996).	
	VIDAL et al., "Survey and Summary, Yeast Forward and Reverse 'n'-hybrid Systems," Nucleic Acids Research 27(4):919-929 (1999).	
	International Search Report, 08-22-2005	
Examiner Signature	Date Considered	

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.